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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,883	04/07/2006	Petrus Jacobus Hubertus Van Asten	NL031226	3338
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EXAMINER HARVEY, DAVID E				
ART UNIT 2621		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/574,883

**Applicant(s)**VAN ASTEN, PETRUS JACOBUS  
HUBERTUSN**Examiner**

DAVID E. HARVEY

**Art Unit**

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2621

1. The following is noted:

A) On pages 1 and 2 of the instant specification, applicant describes the "prior art" on which the instant invention is based. Specifically, as appears to be acknowledged by applicant, it was described, the DVD Video Standard provided for seamless/non-seamless reproduction by inserting a seamless/non-seamless reproduction flag into the video stream for indicating to the reproduction apparatus as to whether or not to reproduce corresponding cells of the video stream in a seamless manner. That is, as appears to be acknowledged by applicant, conventional reproduction apparatus operating in according to the DVD Video Standard comprised:

1) **Reading means** for reading respective first and the second successive cells of a DVD video stream;

2) **Control signal generating means** for detecting whether a seamless/non-seamless reproduction flag exists in the video stream for the respective pair of successive cells and for generating a seamless/non-seamless control signal therefrom indicating to the apparatus whether or not the respective cells should be reproduced in a seamless manner; and

3) **Presentation means** for presenting the video information of the respective cells in a seamless/non-seamless manner according to the generated control signal.

B) As indicated in lines 20-32 on page 2 of the instant specification, it was known for said conventional reproduction apparatus operating in according to the DVD Video Standard to have reproduced a video stream from a two layer DVD. However, as acknowledged by applicant, the DVD Video Standard required the successive cells located at the boundary/transition point between the two layers to be reproduced in a non-seamless manner. The instant disclosure does not explain why such non-seamless reproduction is required between successive cells that occur across the layer boundary/transition point.

However, the examiner maintains that the reason for this requirement was known to those skilled in the art and can be found in the art of record: e.g.,

"In the optical disk having such a double-layer structure, it is necessary to adjust a focal distance of an optical pickup and search an address to be reproduced after the adjustment thereof, when switching the recording layer being in reproduction condition to another recording layer during reproduction. A certain period of time is however required for the aforementioned adjustment of the focal distance and the aforementioned search of the address, thus making it hard to reproduce video information and/or audio information without interruption (in seamless reproduction) in case of continuous data. In view of this case, it is

possible to extremely increase a capacity of a track buffer of a reproduction apparatus, or decrease a reproduction velocity thus leading to deterioration of video and audio quality, so as to carry out seamless reproduction. However, the former countermeasure leads to an increase in the production cost of the recording apparatus, and the latter countermeasure is unfavorable for a user." [paragraph 9 of US Patent Publication #2004/0095812 to Yashimura et al]

Specifically, as described in the "prior art", there was a "necessary" delay in the reading of successive cells across the layer boundary/transition point of two-layer optical discs due to the fact that the focal length of the optical pickup of the reproduction apparatus had to be changes and a search for the next cell address had to be made after the focal length adjustment. This delay resulted in the requirement for non-seamless reproduction between cells that exist across the layer boundary/transitions point unless countermeasures in the design of the reproduction apparatus were taken to compensate for the delay. However, as explained in such prior art, such countermeasures were known to have been unfavorable and/or to have undesirably added to the production cost of the reproduction apparatus.

***To avoid the need for such undesirable counter measures, it is clearly evident that the DVD Video Standard simply opted to require non-seamless reproduction at the layer boundary/transition points thereby avoiding the need for the expensive/undesirable counter measures.***

C) Regardless, the examiner maintains that the prior art of Yashimura et al [see part "B" of this paragraph] was evidences that it was well known in the art to have modified the reproduction circuitry of conventional two-layer optical disc reproduction apparatus to have desirably enabled seamless reproduction of the video stream across the layer boundary/transition point (e.g., via the described extreme increase in track buffer capacity). In light of this teaching, the examiner maintains that it would have been obvious to one of ordinary skill in the art to have modified the circuitry of the reproduction apparatus of applicant's acknowledged prior art [see part "A" of this paragraph] with the appropriate well known countermeasures (e.g., a large capacity track buffer) to enable successive cells of the video stream to be reproduced seamlessly at the layer transition/boundary point. Such a modification would have required the modified circuitry to be configured to ignore the non-seamless reproduction flag located thereat that is required to be present by DVD Video Standard. Such a modification would require the circuitry to detect whether a generated non-seamless flag (and control signal generated therefrom) corresponds to the boundary/transition point so that it can be ignored (i.e., so that it can be replaced/substituted with a seamless reproduction flag (a control signal generated therefrom).

**2. The following is a quotation of the first paragraph of 35 U.S.C. 112:**

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**3. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The following is noted:**

1) As noted in lines 23-32 on page 2 of the instant specification, despite the fact that it was known to have been desirable to produce seamless continuation of video image playback when transitioning between layers, the referenced "DVD Video Standard" instead required cells recorded on different layers of a DVD disc to be produced with a seam. It is the examiner's current understanding that this "requirement" was made out of necessity in that the reading/decoding circuitry of conventional DVD players were simply incapable of making the cell transition between layers without producing a seam (i.e., the "visible hiccup" referenced in the instant specification). That is, as currently understood by the examiner, it was physically impossible for conventional DVD players to perform seamless reproduction when transitioning between layers [SEE paragraph 1 of this Office action and, more specifically, part "B" thereof].

2) To the extent of the examiner's understanding of the instant invention, it appears that the applicant allegedly overcomes the noted "disadvantage" simply by converting the control signal in conventional "DVD video standard" from a non-seamless state to a seamless state during the transition between layers. However, to the extent of the instant examiner's understanding, such a conversion of the control signals effectively tells conventional DVD players to perform a processing, i.e., to produce a seamless transition, that the player is physically incapable of performing. It is not understood how this disclosed/claimed process, i.e., changing the control signal to a seamless production state (i.e., as is claimed in each of the pending claims), overcomes the noted disadvantage as alleged [SEE paragraph 1 of this Office action and, more specifically, part "B" thereof].

3) Clarification is required.

**4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted "prior art" in view of US Patent Document #2004/0095812 to Yoshimura et al.**

A) See paragraph 1 of this Office action and, more specifically, part "C" thereof;

B) The examiner further notes that it is his position that the scope of claim 1 is such that it covers any/all processing in which a reproduction device, operating according to the DVD Video Standard, can be modified to produce seamless reproduction at the layer boundary/transition point. Namely, given the fact that the DVD Video Standard required non-seamless reproduction at the boundary/transition point, any/all circuitry that it modified to produce seamless reproduction at such a boundary/transition point must be modified to:

- 1) Detect the occurrence of the boundary/transition point; and
- 2) To ignore the required non-seamless reproduction flag (a control signal related thereto) in response to the detection, and replace (i.e., substitute) such with a seamless flag and control signal therefor.

**6. Claims 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted "prior art" in view of US Patent Document #2004/0095812 to Yoshimura et al. for the same reason that was explained above for claim 1.**

7. The examiner notes that claims 2 and 5 recite detecting means/steps that do not appear necessary/required by any/all circuitry performing such processing.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. HARVEY whose telephone number is (571) 272-7345. The examiner can normally be reached on M-F from 6:00AM to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Marsha D. Banks-Harold, can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DAVID E HARVEY/

Primary Examiner, Art Unit 2621

DAVID E HARVEY  
Primary Examiner  
Art Unit 2621

